

COMMUNICATION & SOCIETY

Ángel Arrese

aarrese@unav.es

Associate Professor of
Economic and Business
Journalism. School of
Communication. University of
Navarra. Spain.

Submitted
December 6, 2014
Approved
February 12, 2015

© 2015
Communication & Society
ISSN 0214-0039
E ISSN 2386-7876
doi: 10.15581/003.28.2.19-38
www.communication-society.com

2015 – Vol. 28(2),
pp. 19-38

How to cite this article:
Arrese, A. (2015). Euro crisis metaphors in the Spanish press.
Communication & Society 28(2),
19-38

Euro crisis metaphors in the Spanish press

Abstract

This article aims to analyze the use of economic metaphors in the particular case of the European sovereign debt crisis, by the examination of the public discourse as reflected in the Spanish press. The general hypothesis, in accordance with the research undertaken in similar studies on economic metaphors, is that one can expect a fairly common use of the same metaphors –the most traditional ones– and with the same weight among different newspapers, in spite of their editorial and journalistic diversity. The context of the study and the research approach are justified by addressing in the first part of this article a synthetic review of three research fields that converge around this topic: the analysis of conceptual metaphors, the use of them in financial and economic discourses and their particular categorization to make sense of the crisis situations. In the second part, the empirical research design is explained. Finally, the main results are stated and their significance explained. The study confirms the hypothesis of a very high uniformity in the use of the main metaphors among newspapers, which is translated into a problematic, one-sided, interpretation of the crisis.

Keywords

Economic metaphors, economic news, 2008 crisis, sovereign debt crisis, Spain, Spanish newspapers

1. Introduction

The financial and economic crisis that began in the United States and Europe in 2008 has been a great testing ground for experimenting with all kinds of expressive resources used by specialists and the media to explain the nature of a really complicated economic situation. As on many other occasions, when confronted with phenomena of very abstract nature, the use of metaphors for understanding current events

has been a widespread practice. “Toxic assets”, “green shoots”, “stress test”, and a host of similar expressions have been part of the language of the crisis, perhaps more intensively than ever. The economic metaphors have even captured media attention in publications as influential as *Time*, *The Economist*, *Financial Times*, *The New York Times*, or *The Wall Street Journal*.¹

This article aims to analyse the use of economic metaphors in the particular case of the European sovereign debt crisis and, more precisely, in its coverage by the Spanish press. The analysis of metaphors used in the newspapers’ discourse on the crisis makes it possible to evaluate to what extent the cognitive frames of the news, as captured by those rhetorical devices, converge or diverge between different types of publications.

This paper begins with an introduction to the theoretical background used to contextualize the research. It presents a synthetic review of the state of the art in three research fields that converge around this topic: the analysis of conceptual metaphors, its role in financial and economic discourses, and its particular use to make sense of crisis situations. Sections 2 and 3 detail the research design and methodology and describe the empirical results. Finally, discussion and conclusions are given in Section 4.

2. Theoretical framework: cognitive metaphors and the economic crisis

2.1. The conceptual metaphor approach

Many contemporary studies of metaphor are carried out in the framework of cognitive linguistics, more specifically following the conceptual metaphor theory (CMT) developed by Lakoff and Johnson (1980a). Since the publication of his book *Metaphors We Live By*, research based on this approach has been used to analyse subjects in fields as diverse as politics (Lakoff, 2004; Mussolff, 2004; Scott, 1997; Xue et al., 2013), international relations and conflicts (Kennedy, 2000; Lule, 2004; Mussolff, 1995; Wander, 1984), social problems (Peeters, 2010), science and technology issues (Berdayes & Berdayes, 1998; Hellsten, 2000; Luokannen et al., 2013; Meyer et al., 1997), problems of public health (Noteyko et al., 2008; Sonntag, 1990; Wallis & Nerlich, 2002), etc. Of course, as will be seen later, economics, business, and finance have also been a fertile ground for the application of rhetorical analysis from this perspective.

Lakoff and Johnson (1980a) suggest that our conceptual system is in good part metaphorically structured, because humans conceptualize abstract ideas in terms of concrete experiences, especially sensitive experiences. In this way, people use their knowledge of objects, actions, and familiar situations (feelings, emotions, sensations, products, natural phenomena, etc.) to understand more complex fields (science, economics, technology, etc.). This involves conceptualizing one kind of object or experience in terms of

¹ See, Kiviat, B. “Green shoots: The trouble with economic metaphors.” *Time*, 22 May 2009; *The Economist*. “Economic metaphors. Life is elsewhere.” 24 May 2011; Rigby, R. “Metaphor loses its meaning.” *Financial Times*, 5 September 2011; Krugman, P. “Block those metaphors.” *The New York Times*, 12 December 2010; Phillips, M. “In financial crisis, metaphors fly like bad analogies.” *Wall Street Journal*, 27 September 2008; Milken, M. & Simons, J. “Illness as Economic Metaphor.” *Wall Street Journal*, 20 June 2009. Many other national newspapers dedicated articles and columns to this issue: Stewart, H. “Let’s put the brakes on these financial crisis metaphors.” *The Guardian*, 16 October 2011; Chalmers, P. “How to save yourself from the media’s metaphors of financial mayhem.” *The Guardian*, 23 June 2012; Archer, J.-I. “Le danger des métaphores en économie.” *Les Echos*, 28 October 2012; Stocker, F. “Metaphern. Wenn sich die Finanzwelt mit Tieren vergleicht.” *Die Welt*, 3 March 2013; Magnani, G. “Le metafore della crisi economica.” *Valori*, 18 November 2011; Hernández, A. “Las metáforas de la crisis.” *ABC*, 29 August 2009.

a different kind of object or experience; and they do that because “metaphor is primarily a matter of thought and action, and only derivatively a matter of language” (Lakoff & Johnson, 1980a: 153). This approach to conceptual metaphors seamlessly connects to the theories of *framing*, both in its more rigorous interpretation in the field of public communication (Scheufele & Iyengar, 2012) and in its application in studies on economic behaviour and decision making (Fairhurst, 2011; Kanehman & Tversky, 1984). It also connects with new research proposals that not only consider the role of metaphors in the improvement of understanding but also in the reasoning that leads to the adoption of certain positions and decisions on complex social, political, and economic issues (Morris et al., 2007; Thibodeau & Boroditsky, 2011; Williams et al., 2011; Williams, 2013).

When working with *frames*, the conceptual metaphor theory sees individual metaphorical expressions in the context of conceptual maps that connect generic thematic domains that serve as sources of meaning – *source domain*, for example “war” – with abstract target domains – *target domain*, for example “market” (Lakoff, 1993: 208–209). Paralleling the kinds of nonmetaphorical concepts, Lakoff and Johnson (1980b) distinguished roughly three types of metaphorical concepts, which are realized by a vast number of linguistic expressions: a) *orientational metaphors*: arising from our physical constitution and representing spatial orientations – horizontal and vertical, up and down, inside and outside, etc. (for example, the stock market is up); b) *ontological metaphors*: something is categorized into a peculiar form, through the projection of an entity or substance status onto something that does not have that status inherently (the economy is a container, for example); and c) *structural metaphors*: one kind of experience or activity is structured in terms of another kind of experience or activity (for instance, the crisis is a war).

One of the most controversial aspects of the conceptual metaphor theory is the degree to which the metaphorical concepts are universal or not. Lakoff and Johnson (1980b) tend to give an affirmative answer to this question, as the key to understanding the use of the metaphor is cognitive, not linguistic. However, both empirical research and other theoretical approaches to metaphorical analysis (sociolinguistic, anthropological, cultural, etc.) increasingly challenge that position. Kövecses (2005) argues that cognitive linguistics has exaggerated the degree of universality of metaphorical structures, ignoring the many cases of particular metaphorical conceptualizations. In fact, he maintains that the analysis of metaphorical diversity is at least as important as that of commonalities, something that could explain the growing interest in international comparative studies (Kövecses, 2005). This is the approach that we choose for our study, taking into account that metaphorical conceptualization is a process in which the speaker is under two competing pressures: the pressure of a certain incarnation of a universal expressive embodiment and that of personal, cultural, and local contextual factors (Kövecses, 2008).

Economics and finance, as will be seen below, are fields particularly suitable for the analysis of discourses from the perspective of conceptual metaphors. Likewise, the globalization of economic phenomena and of economics as a discipline facilitates the study of the interaction between universality and diversity in metaphorical thought. In this sense, the study of a complex and transnational topic such as the euro crisis is particularly suitable to carry out a deep and detailed analysis of the use of metaphorical resources from that perspective, both at a national and international level.

2.2. *Metaphors, economics, and finance*

Since the birth of economics as a separate discipline, economic discourses have always relied on metaphorical thought to better understand and explain economic phenomena, which have usually been characterized by their high level of abstraction and complexity.

There are surely few if any metaphors in the academic world as famous as the “invisible hand” of Adam Smith (Kennedy, 2009), whose *The Wealth of Nations* also included other language and thought figures like the “economy as a machine” (Aspromourgos, 2012; Gremaschi, 2002; Ötsch, 1993). In fact, Adam Smith had very clear ideas about the role of language and rhetoric, a subject about which he wrote extensively in *Considerations Concerning the First Formation of Languages* (1761). Smith believed that plain language was the only acceptable form of modern rhetoric (Skinner, 1994: 8).

Many other metaphorical structures that are used frequently today appeared in classical texts as well, such as the biological metaphors used by authors like Malthus at the end of the 18th century and by Menger and Hayek in the 19th and 20th centuries (Ginzburg, 2009; Ötsch, 2007) or the disease related metaphors used to explain crisis in the 19th century (Besomi, 2011). Specifically in the world of finance, the sudden ups and downs of stock markets have historically been interpreted in terms of the binomial health-disease, by using metaphors that range from “speculative fever” to “contagion” processes (Besomi, 2011; Fabian, 1989). Some of these “classical” metaphors are so embedded in our colloquial language that we have almost forgotten their peculiar origin, as in the case of “crash-crack” applied to financial markets. Both expressions were used in texts during the 17th century.

However, despite this central role of metaphors in the discourse of economists, it was not until the last decades of the 20th century that some prominent researchers started to pay attention to the multiple implications of the use of rhetoric devices in economics. Henderson (1982) and McCloskey (1983) focused their research on its importance in economic thinking and reasoning, giving rise to a very fruitful and in many cases quite controversial line of academic work (Dudley-Evans & Henderson, 1990; Henderson et al., 1993; Klammer et al., 1988). In particular McCloskey's works and above all her *The Rhetoric of Economics* (1985) have served as the basis for further research on the persuasive nature of economic science, both in its conceptual and methodological aspects. According to McCloskey, “an economist makes an intellectual world by choosing or failing to choose a metaphor of the speech in the economy. The economic actors themselves make their world with metaphors” (McCloskey, 1995: 232). This rhetorical resources, in consequence, are essential in economic thought, even in the more formalized economic thinking (McCloskey, 1983). Tensions between abstraction and concreteness, intuition and logic, mathematics and humanities are more than simple drawbacks in the development of economic knowledge; they are the cornerstone of the ability of this discipline to establish a connection with society (Keppler, 1998; Kurdas & Majewski, 1994). Metaphors, from this perspective, are central tools for the improvement of economic storytelling (Klammer & Leonard, 1994; Strassmann, 1993). At the end of the day, McCloskey remarks, “economists are not so very different from poets and novelists” (McCloskey, 1990: 21).

This growing interest in economic metaphors and its perfect fit into the logic of conceptual metaphorical analysis has encouraged the undertaking of many studies on different aspects of its use in economic public discourses. On the one hand, there is a solid research tradition focusing on the classification of the main economic metaphors in basic *source domains* (natural phenomena, living organisms, health and disease, mechanical objects, etc.). This category of research includes works with a generic and universal approach (Boers & Demecheleer, 1997; Boers, 1999; Jáckel, 1997; Resche, 1998; Richardt, 2005; Skorczynska & Deignan, 2006) as well as studies on the peculiarities of national economic discourses (Fukuda, 2009; Orts & Rojo, 2009). It is relatively common that both types of studies deal with the metaphorical representation of economic issues in the media, above all in the economic and financial media (Herrera Soler, 2008; Koller, 2003; Koller, 2006; Porto & Romano, 2013; Sarmiento, 2007; Greco, 2009).

On the other hand, there are also abundant examples of studies that analyse the role of certain conceptual metaphors when explaining specific subjects and events, such as monetary crises (White, 1996), the introduction of the euro (Charteris-Black & Musolff, 2003; Resche, 2008; Semino, 2002), the turmoil in currency markets (Oberlechter et al., 2004), management issues (Palmer & Dunfor, 1996), the communication of banks and financial institutions (Bielena-Grajewska, 2009; Touris & Hargie, 2012), or the discourses around the role and behaviour of central banks (Pecican, 2007; White, 2000). A separate comment is deserved for the analysis of some peculiarities of financial communication, whose rhetorical intensity has drawn increased interest among experts. Both the use of metaphors in financial texts (Ahmad, 2002; Charteris-Black & Ennis, 2001; Rojo & Orts, 2010; Serón, 2005; White, 1997) and their presence in the ordinary language of the stock markets and stock market crisis (Gómez et al., 1999; Kelly, 2001; Morris et al., 2007; O'Mara, 2015; Rodríguez & van den Winkel, 2005) have been the basis to produce an interesting research corpus.

Finally, in recent years a good number of studies have examined specific structural metaphors and spheres of meaning that function as *source domains* and their relation to different *target domains*. While not trying to be exhaustive, some examples of this type of study include the analysis of typical crisis metaphors – *meltdown* (Kelly, 2001; Stronach et al., 2013), *turbulence and turmoil* (White, 2004), *tsunami* (Pühringer & Hirte, 2013) – the use of abstract concepts to explain different economic processes – *market of ideas* (Sparrow & Goodin, 2001), *growth* (White, 2003), *container* (Alejo, 2010) – or the references to specific thematic fields – nautical metaphors (Gallego Hernández, 2010), health and disease (Peckham, 2013; Ubonait & Seskauskien, 2007; Williams et al., 2011), evolution and natural selection (Pessali, 2009; Watkins, 2010), and living organisms or machines (O'Mara, 2015; Silaski & Durovic, 2010; Wang et al., 2013).

Many of the works cited above have adopted a comparative perspective by trying to see the extent to which the main metaphors are present or not in different languages and in diverse contexts. They have usually addressed the issue of universality and diversity in the use of the conceptual metaphors across countries as well as the linguistic challenges posed by the translation of metaphorical expressions in several languages. The comparisons frequently take the form of a contrast between texts in English – the “lingua franca” of economics, business and finance – and texts in other languages, such as Spanish (Charteris-Black & Ennis, 2001; Herrera Soler, 2008; Rojo & Orts, 2010), German (Charteris-Black & Musolff, 2003), Romanian (Pecican, 2007), Slovenian (Bratoz, 2004), etc. There are also comparisons between languages other than English, such as those of metaphors in French and Dutch (Boers & Demecheleer, 1997), Italian and Spanish (Gilarranz, 2010), French and Vietnamese (Truong, 2012), or German, Polish and Spanish (Bielena-Grajewska, 2009).

In general, even in the case of languages so different as French and Vietnamese, to cite an extreme example, it has been concluded that the metaphorical conceptualization of economic phenomena is quite similar across countries and that the small differences found are explained largely by contextual factors, for instance differences in socio-economic circumstances. To date, there have been few studies (see, e.g. O'Mara-Shimek et al, 2015) testing whether there are fundamental differences in the use of economic metaphors among different types of newspapers from the same country.

2.3. The metaphors of the 2008 crisis

The financial and economic crisis that started in the United States and Europe in 2008 makes an excellent object of study for anyone trying to understand the role of economic metaphors in public discourse. In fact, numerous investigations in recent years have already

addressed this topic from different perspectives, taking news texts as reference. Some of them have analysed the uniformity in the use of metaphors among different countries. Silaski and Durovic (2010) confirmed this idea in the case of the British and Serbian press, Esager (2011) between the British and the Danish newspapers, Wang et al. (2013) working with texts in English and Russian, Joris et al. (2014) analysing the press in the Low Countries and Pühringer and Hirte (2013) when comparing German, Austrian, and Swiss publications. In all of these cases, there are similar conclusions: the use of the main conceptual economic metaphors is stable and they are published regularly in different types of news from different countries; by contrast, the variables that could change from one to another are the frequency of use and some specific cultural expressions included in particular metaphors.

A number of other studies have paid attention to the more or less positive frames of the crisis as built through the use of certain types of metaphors. Orts and Rojo (2009) have studied the evolution from positive towards negative metaphors in the case of Spain before and after 2008 and have also compared the main frames in two publications: one British, *The Economist*, one Spanish, *El Economista* (Rojo & Orts 2010). Slintáková (2010) has carried out a quite similar analysis, in this case between the Czech and German press, to see the evolution of the metaphors considering their linkage with positive or negative emotions. Finally, to cite one more example, Breeze (2014) has studied the negative frame shown by the British press when using metaphors that reinforce old stereotypes about southern Europe, stigmatized as poor, idle, and potentially dangerous. All these studies have called attention to the importance of local context (economic, cultural, etc.) to understand the differences in the choice of conceptual metaphors, both over time and between countries or cultures (Abdel-Raheem, 2013).

Apart from these conventional studies on media use of economic metaphors during the crisis, some researchers have focused on other aspects of the news coverage, such as the visual representation of conceptual metaphors on covers (Cortés de los Ríos, 2010) or in newspaper cartoons (Bounegru & Forceville, 2011). In other cases, adopting a more critical approach, there are studies that point out the strong ideological dimensions of metaphorical thinking (Koller, 2005). Horner (2011) explains, for instance, how a metaphor like “bailout”, used to explain the US economic stimulus plan, evacuated human agency, portraying the government decision as an emergency measure necessitated by crises such as illness, natural disasters, and mechanical failures. This and other tropes very popular during the crisis implicitly indicated what was right or not (Silvana et al., 2010), the type of cure that was needed to restore the economy to a sustainable growth path (Giacché, 2012), returning to a state of normality – the already known *status quo* – toward which the economy should supposedly and necessarily tend (Lizcano, 2008; Steiner, 2010; Tourish & Hargie, 2012; Wengeler, 2013).

In the majority of studies already mentioned in this review, the authors work with some kind of categorization of the main conceptual economic metaphors. In some the classical differentiation between three types of metaphors (orientational, ontological, and structural: Lakoff & Johnson, 1980a) is applied, but most studies consider only a few of them, usually the most common and easy to analyse. Table 1 shows a summary of the categories used in a selection of these studies.

Table 1. Typologies of conceptual metaphors

Authors	Conceptual metaphors in the news about the 2008 economic crisis
Álvarez-Peralta (2014)	Natural disaster; Biomedical and Cyborg (man-machine system)
Bounegru and Rorceville (2011)	Catastrophe/Disaster, Illness/Death, Begging, Others
Cortés de los Ríos (2010)	Natural phenomenon

Esager (2011)	Movement, Liquid, Living being, Medical treatment, Sport, Machine, Building, Journey, Object
Horner (2011)	Body, Machine, Natural disaster, Vehicle, Nuclear disaster
Joris et al. (2014)	War, Disease, Natural disaster, Construction, Game
Lizcano (2008)	Nature, Disease, Personification, Religious
O'Mara-Shimek et al. (2015)	Organism, Natural phenomenon, Machine, Standing structure, Container
Orts and Rojo (2009)	Great chain of being (Object, Building, Natural force, Supranatural force, Human behaviour, Illness, Celebration, Living being, Machine) Path-scheme (Verticality, Source-path-goal, Journey, Container) Event (War, Competitive game, Show business, Medieval tournament)
Porto (2012)	Organic, Mechanical
Pühringer and Hirte (2013)	Disease/disaster (nature, military, mechanics), Sensitive actor (anthropomorphism), Party/game
Rojo and Orts (2010)	Great chain of being (Object, Building, Natural force, Supranatural force, Human behaviour, Illness, Celebration, Living being, Machine) Path-scheme (Verticality, Source-path-goal, Journey, Container) Event (War, Competitive game, Show business, Medieval tournament)
Silaski and Durovic (2010)	Health (Person, Sick person, Treatment)
Slintáková (2010)	Water related, Body, War, Transport, Medical, Nature, Sports, Colours, Film and theater, Spirals and bubbles, Furniture, Gastronomy
Soddemann (2013)	Ontological (Container, Person, Enemy) Orientational (Horizontal – personal self-movement; Vertical – spiral, abyss) Structural (Storm, Illness, Game, Fire)
Steinert (2010)	Illness, Organisms, Revolution
Wang et al. (2013)	Living organism, Sick organism

As seen in Table 1, there exists on the one hand a considerable heterogeneity between the schemes of conceptual metaphors studied by researchers; on the other, there also exists an implicit logic of certain general categories that emerge as dominant. Leaving aside the orientation metaphors and thinking about a categorization based on ontological and structural ones – it is not always easy to establish a clear separation between both – one might conclude that six categories include the majority of the cases considered in Table 1. These categories are: 1) health and disease; 2) natural events and disasters; 3) events around artefacts and constructions; 4) wars and clashes; 5) sports, games, and entertainment; and (6) actions and situations of living beings. This is the characterization of metaphors that has been adopted for the empirical study described below, taking into account that the classification reflects the main categories analysed in the studies of the global crisis that began in 2008 and also in those related to the euro crisis.

3. Research design and methodology

3.1. Research design

The sample of metaphors for this article is based on the content analysis carried out in the framework of a European research project “Euro Crisis and the Media” (in which the author took part), led by the Reuters Institute for the Study of Journalism (Oxford). The study analyses stories about the euro crisis published in newspapers from ten countries of the

European Union (Belgium, Finland, France, Germany, Greece, Italy, Netherlands, Poland, Spain, and the United Kingdom). The identification of the main metaphors in each news article was part of the content analysis.²

The selection of media was made in an effort to draw comparisons between different types of national newspapers (according to their ideological orientation and their general or specialized approach). The leading title in each category was selected. In the case of Spain the newspapers finally chosen were: a right-wing daily (*ABC*), a left-wing daily (*El País*), a newspaper more in the middle of the ideological spectrum (*El Mundo*), and an economic and financial title (*Expansión*).

The daily newspaper is the ideal outlet for a discourse analysis focused on economic news because it has always been the most influential media when covering economics and finance, in particular through its ability to shape the discourse among the elites and to dictate the agenda for the rest of the news media (Arrese, 2015). More generally, as noted by Krennmayr (2011), news stories are especially rich as sources of figurative language. Unlike academic texts, which exhibit a much higher degree of unclear terminology, reading newspaper articles does not require much expert knowledge to understand their general meaning. As a result, the contextual meaning of the words and their role in specific metaphors can be set with clarity in the vast majority of cases.

Full-text articles were retrieved by national researchers from two databases: Factiva and Lexis-Nexis. The criteria for searching the news cases were to include in the sample all the articles that had the words “euro”, “crisis”, and “Europe” in any part of the text: the headline, the lead, or the body. All of them had to be published around eleven key events or developments that were selected by the multinational research team, as representative of the evolution of the euro crisis between 2010 and 2012. More precisely, dailies were analysed for seven days prior to and seven days after each of those events. The periods of analysis and the central news events are shown in Table 2.

Table 2. Periods of analysis and central news events

Nº	Period	Central news event(s)
1	4-2 to 18-2 (2010)	The European Union summit regarding the role of European governments and the International Monetary Fund (IMF) in crisis intervention on 11–12 February 2010
2	25-4 to 9-5 (2010)	Eurozone members and IMF agreement for 100bn euro intervention for Greece on 2 May 2010
3	9-12 to 23-12 (2010)	Changes to the European Union Contract made 16 December 2010 that allowed establishment of an emergency fund for the Eurozone
4	29-7 to 12-8 (2011)	European Central Bank requires Italy to implement increased austerity measures, 5 August 2011
5	28-9 to 12-10 (2011)	Greek general strike against austerity measures, 5 October 2011.
6	20-10 to 3-11 (2011)	EU Summit increases the stability fund, extends new aid, and requires banks to raise new capital, 26–27 October 2011
7	5-11 to 19-11 (2011)	Berlusconi resigns as Italian prime minister and Monti appointed, 12–13 November 2011, and French austerity measures begin
8	20-11 to 30-11 (2011)*	European Commission issues Green Paper on stability bonds and proposes bringing national budgets under EC control, 23 November 2011
9	16-5 to 30-5 (2012)	EU summit to boost economic growth and balance austerity measures, 23 May 2012, attention begins focusing on Spain’s economic conditions, and the United Kingdom holds governmental meetings to protect its financial system

² For more details on the research project, see <https://reutersinstitute.politics.ox.ac.uk>

10	21-6 to 5-7 (2012)	Spain formally requests assistance, 25 June 2012; German Prime Minister Merkel calls the Eurobonds “economically wrong and counterproductive”, 27 June 2013; EU Summit on sovereign debts, 28–29 June 2012
11	8-7 to 22-8 (2012)	Merkel affirms need for member states to adhere to budget targets and for European monitoring of compliance, 15 July 2012

(*) Smaller period as a result of overlapping dates between Period 7 and 8.

Articles were analysed by the author and by encoders trained in content analysis, who worked with a coding sheet of nearly 50 variables. The coding was carried out between January and March of 2013. In tests using Holsti's intercoder reliability equation, ten paired tests of coders achieved an average reliability of .78, an indication of an acceptable level of reliability. In total, 1.076 articles were analysed.

3.2. Methodology

One of the tasks in the content analysis was to take note of the two main metaphors in each article. The encoder had to identify whether or not an article included relevant metaphors – clear metaphorical expressions that an ordinary reader could easily identify as such – and if that was the case, record up to two per article, with the first occurrence as the main one. The aim was not to conduct an exhaustive rhetorical analysis but rather the type of analysis that a normal newspaper reader could reasonably make due to his or her familiarity with the typical linguistic resources used in journalistic texts. As a result, we obtained a database consisting of 777 metaphors, each linked to the rest of the content analysis variables.

The next step in the preparation of the database was to assign each metaphor to one of the six types of conceptual metaphors already discussed: 1) health and disease; 2) natural events and disasters; 3) events around artefacts and constructions; 4) wars and clashes; 5) sports, games, and entertainment; and (6) actions and situations of living beings. The author of this article and six professors from his department independently conducted the allocation of a sample of expressions to a conceptual metaphor, after a basic explanation of the meaning of each category. This exercise tried to emulate the thinking of a normal newspaper reader, not of a language expert. The intercoder reliability for this task was measured through the Holsti test, which achieved a value of .86, significantly above the .80 limit considered as adequate in such studies. On those occasions where the discrepancy was large after analysing a low Holsti value case by case, we studied the most common meaning of that metaphor and decided the most appropriate allocation. The levels of disagreement were greater for metaphors with expressions such as “collapse”, “alarm”, “emergency”, “rally”, and “calm”. Table 3 lists some examples of the definitive assignment of keywords from different metaphors to the conceptual metaphor categories.

Finally, a small technical adjustment was needed to make possible the statistical analysis of almost eight hundred metaphors. A new variable was designed in which every original metaphor was substituted by a label representing the conceptual metaphor to which it belonged. More precisely, we created the labels: 1) Disease; 2) Natural; 3) Mechanical; 4) War; 5) Sport & Entertainment; 6) Organism). This facilitated the analysis of metaphors, as they were processed with SPSS 17.0 in relation to the rest of variables.

Table 3. Conceptual metaphors and metaphorical expressions

Conceptual metaphors	Spanish	English
DISEASE	Inyección de dinero, riesgo de contagio, efecto contagio, la enfermedad europea, la enfermedad griega, fiebre de deuda,	Money injection, fear of contagion, contagion effect, European disease, Greece's disease, social fever, debt fever,

	fiebre social, estado comatoso, el virus de la deuda, la medicina económica, medicina de austeridad	comatose state, debt virus, economic medicine, medicine of austerity
NATURAL	Tormenta financiera, brotes verdes, burbuja inmobiliaria, incendio económico, huracán financiero, terremoto geopolítico, nubarrones monetarios, clima financiero, sequía crediticia	Economic storm, green shoots, housing bubble, economic fire, financial hurricane, geopolitical earthquake, monetary rain clouds, financial climate, credit drought
MECHANICAL	Grifo del dinero, naufragio financiero, el barco se hunde, la terrible máquina europea, el horno comunitario, el túnel de la crisis, apretarse el cinturón, la locomotora de Europa	Money tap, financial shipwreck, the sinking ship, the European machine, EU oven, crisis tunnel, the European building, economic belt-tightening, growth engine, Europe's locomotive
WAR	Guerra en los mercados, el acoso financiero, Waterloo económico, acabarse la pólvora, la artillería del Banco Central Europeo, el campo de batalla, en primer línea de fuego, quedarse sin cartuchos, arma de destrucción masiva, la bomba de la deuda	Market wars, financial siege, economic Waterloo, ending gunpowder, European Central Bank firepower, battlefield, battle frontline, to run out of firepower, weapon of mass destruction, the debt bomb
SPORT & ENTERTAINMENT	Barra libre de liquidez, Rally de fin de año, echar balones fuera, bola de partido, jugar una mano de póquer, un cuento de Navidad, las fichas de dominó, órdago económico, bola en juego, cartas sobre la mesa, lidiar con la crisis	Liquidity open bar, new year rally, throw the balls out, match ball, to play a poker hand, Christmas tale, dominoes, economic <i>órdago</i> , play ball, cards on the table, to fight the crisis bull
ORGANISM	Rescate financiero, el músculo de las reformas, Talón de Aquiles, tragedia griega, el fantasma de la intervención, hacer los deberes, un plan sin cocinar, el lobo de la crisis, suicidio de Europa, los mercados se duermen	Financial bailout, reforms muscle, Achilles heel, Greek tragedy, Teutonic monster, the ghost of intervention, to do the homework, uncooked plan, the wolf of the crisis, European suicide, markets fall asleep

3.3. Hypotheses

Bearing in mind the ideas pointed out in the theoretical framework, the following two hypotheses are proposed:

H1. It is expected that the dominant conceptual metaphors used in the press coverage of the European sovereign debt crisis will be the most traditional ones, in particular those in the source domains “disease” and “natural”. This selection would be justified because of the peculiar nature of this crisis – a multinational crisis, with a lot of interactions between countries, and perceived as systemic – which favour the use of metaphorical frames that highlight external causes of the economic and financial problems. Such a systemic state of affairs can be easily presented as something hardly controllable, independent, to some extent, of each country’s particular responsibility.

H2. It is expected that the use of metaphors in the different newspapers analysed follows similar patterns, both as regards the prevalence of the main conceptual metaphors and as regards the ranking in importance of the six categories, despite the different ideological orientation and degree of specialization of publications. This hypothesis would confirm the universality in the use and weight of the main economic metaphors in the media discourse about the crisis, regardless of the editorial and thematic diversity of newspapers.

4. Results

A general view of the articles analysed shows that about half of them (49.7 %) include at least one metaphor and almost one fourth (22.5%) include two metaphors. As shown in Table 4, *El*

País is the daily newspaper that makes the most frequent use of this rhetorical figure (54.5% of articles with at least one metaphor), and *El Mundo* the publication which uses them in the lowest percentage (41.9%).

Table 4. Distribution of number of metaphors by newspaper

	<i>ABC</i>	<i>El Mundo</i>	<i>El País</i> *	<i>Expansión</i>	Total
	187	222	475	192	1.076
Number of metaphors	128	142	372	135	777
% with at least one metaphor	48.1%	41.9%	54.5%	48.4%	49.7%
% with two metaphors	20.3%	22.1%	23.8%	21.9%	22.5%

Note: (*) The big difference between the number of metaphors in *El País* in comparison to the rest of dailies is due to a great extent to the fact that, in this case, the news database used for retrieval of articles included a special business section from the weekend edition.

Table 5 resumes the frequency analysis for the total use of conceptual metaphors, as well as for their distribution among the four daily newspapers. In all cases the frequency and the percentage in relation to the total of the metaphors for each newspaper and for the total of articles are presented together.

Table 5. Distribution of categories of conceptual metaphors by newspaper

Conceptual metaphors	<i>ABC</i>	<i>El Mundo</i>	<i>El País</i>	<i>Expansión</i>	Total
Disease	35(27.3%)	47(33.1%)	92(24.7%)	38(28.1%)	212(27.3%)
Natural	25(19.5%)	26(18.3%)	65(17.5%)	25(18.5%)	141(18.1%)
Mechanical	16(12.5%)	18(12.7%)	61(16.4%)	16(11.9%)	111(14.3%)
War	18(14.1%)	14(9.9%)	44(11.8%)	15(11.1%)	91(11.7%)
Sport and Entertainment	13(10.2%)	13(9.2%)	34(9.1%)	12(8.9%)	72(9.3%)
Organism	21(16.4%)	24(16.9%)	76(20.4%)	29(21.5%)	150(19.3%)

Note: Data in bold type reflects the higher positive deviations observed in some conceptual metaphors; data in cursive makes reference to significant rather low percentage values per category.

As can be seen in Table 5, the metaphors around health and disease (Disease) are the most common, both in each journal and in absolute terms. The second place is shared by the metaphors of actions and situations of living beings (Organism) and those based on natural phenomena (Natural). Except in one case (the daily *ABC*) the third place is occupied by metaphors of artefacts and constructions (Mechanical), and the least frequent ones, around 10% of the total in each case, are those of war and sport and entertainment.

Beyond the clear predominance of health and disease expressions, it is necessary to comment on the organism and natural metaphors in second place, since it can be said that the latter frame more clearly the way that the crisis has been discussed in public discourse. In fact, as already mention, the category “Organism” is quite miscellaneous, and welcomes metaphorical expressions coming from very heterogeneous source domains.

To verify this observation, the sample of metaphors was analysed from the perspective of corpus-based research methodologies, which highlight the power of “keywords” as central elements in the study of metaphors (Stefanowitsch, 2005, 2006; Koller, 2006). To carry out the analysis, the metaphors were treated with the content analysis package QDA Miner 4.1.3 and with its software for word analysis WordStat 6.1, already used in other similar studies (Lowry et al., 2008). In total, the corpus of words extracted from the

metaphorical expressions consisted of 2,316 words, reduced to 953 after the implementation of the dictionary of excluded terms run by WordStat 6.1. The type-token ratio (TTR), a measure of repetition in language that reflects breadth of vocabulary, was 0.41. That implied that the corpus did not have a large lexical variety, which helped to focus the analysis on smaller samples of terms.

Table 6 provides the summary of the 20 most frequently used terms, whose joint frequency (266) represents 34.1% of the total of metaphors analysed. As data shows, these most common words, all of them with frequencies of appearance above four, belong to metaphor categories of disease (95), natural (74), mechanical (38), organisms (28), sport and entertainment (17), and war (14). The data is useful to understand the greater variety of words related to organism metaphors, insofar as the majority of the terms in this category – there are only two keywords in the top 20 – are supposed to have frequencies of appearance below five.

It is also interesting to point out that “contagion” was the metaphorical keyword most common in the coverage of the euro crisis in the Spanish press. The use of “contagion” metaphors has many implications on how the crisis is understood as having something of an epidemic character – transmitted from healthy to sick bodies – that can reduce to some extent the responsibility of the “infected”. The contagion metaphor establishes an analogy between the economic and the medical world, a very popular comparison since the 1990s, but not free from serious problems when applied to the economic and financial world (Peckham, 2014).

Table 6. Top 20 metaphorical keywords with higher frequencies*

Keyword	Frequency	Category	Keyword	Frequency	Category
Contagion	44	DISEASE	Shoots	6	NATURAL
Storm	18	NATURAL	Firewall	6	NATURAL
Bubble	16	NATURAL	Motor	6	MECHANICAL
Rescue	14	ORGANISM	Injection	5	DISEASE
Fire	12	NATURAL	Blood	5	DISEASE
Turbulences	10	MECHANICAL	Bleeding	5	DISEASE
Medicine	7	DISEASE	Virus	5	DISEASE
Earthquake	7	NATURAL	Burned	5	NATURAL
Bar	7	SPORT & ENT.	Building	5	MECHANICAL
Panic	6	ORGANISM	Tap	5	MECHANICAL

(*)Note: The Top 20 words serve as a ranking, but there are four more terms with a frequency of 5: Battle (WAR), War (WAR), Domino (SPORT & ENT.), and Match (SPORT & ENT.). The rest of words in the corpus of metaphors have a frequency below five.

These findings confirm H₁ implying that the more common metaphors, especially disease and nature metaphors, were dominant in the press discourse on the euro crisis. It remains to be tested whether the ideological and editorial differences among newspapers explain or not the different patterns of metaphorical use (H₂).

Referring back to Table 5, it can be observed that, in general terms, the four newspapers show a quite similar mix of conceptual metaphors. There exist some differences, such as a greater relative use of metaphors of war in *ABC*, of disease expressions in *El Mundo*, mechanical and organism in *El País*, and also organism metaphors in *Expansion*; by contrast, there are fairly low proportions of disease metaphors in *El País* and war metaphors in *El Mundo*. However, from a statistical point of view, these discrepancies are not significant and cannot be explained by the effect of the “newspaper type” variable. The chi-squared test for the distribution of metaphors across the types of publications is not significant either for the first metaphor in each article (χ^2 (18, N = 1.076)

= 18,591, $p = .417$) or for the second ($\chi^2 (18, N = 1.076) = 12.683, p = .810$). These results are consistent with the hypothesis that the use of economic conceptual metaphors is very uniform, regardless of the ideological orientation or degree of specialization of newspapers. This finding reinforces the idea of universality in the use of the main types of economic metaphors, not only among countries – an extensively investigated subject in academic literature – but also among different media within the same country, at least in the case of a crisis so systemic as the euro crisis.

4. Discussion

The analysis of the economic metaphors used by the Spanish newspapers when covering the euro crisis confirms the two hypotheses made in this work. On the one hand, the dominance of disease and nature expressions shows how traditional conceptual metaphors have dominated public discourse, despite the very new, complex, and peculiar nature of this crisis. On the other hand, it has been verified that the principle of universality in the use of conceptual metaphors is quite consistent, even when tested in the same country among newspapers of very different ideological and editorial nature.

With regard to the first conclusion, it is interesting to note the fact that the prevailing metaphorical frames, disease and nature, assume an understanding of the crisis as something quite uncontrollable, not easily managed by human intervention alone. Compared to the rest of the conceptual metaphors, disease and nature ones appeal less strongly to the responsibility of individuals, placing the interpretation of the crisis in a context far away from concepts such as guilt or mismanagement by government, politicians, companies, citizens, etc. The crisis, in this sense, is mainly due to external causes, ‘is something that infects us’. On the other hand, from the point of view of how to respond to problems, these metaphorical frameworks suggest that solutions to economic challenges require technical answers (as medical treatments against diseases) or urgent measures (as emergency plans for natural disasters). Considering the period under analysis – February 2010 to August 2012 – in which the sovereign and banking debt problems of Greece and Spain were at the centre of the hurricane, it is understandable that Spanish media coverage reflected with these metaphorical frames the fear of “contagion” from the Greek “terminal” financial situation, as well as the fate of a country whose economic destiny depended on the Eurozone distress. Of course, this rhetorical interpretation of the crisis was not shared by all European countries. Joris et al. (2014), based on the analysis of a similar corpus of metaphors in the case of the Netherlands, highlight how in that country war metaphors were prevalent, followed by the disease category.

As for the second conclusion, the uniformity in the use of metaphors by the four daily newspapers analysed reflects a common view of the euro crisis, at least from the perspective of its rhetorical framework, which is quite surprising taking into account their ideological and editorial diversity. This fact confirms the power of the conceptual metaphors to create shared frames of interpretation for current events, in this case, for an economic and financial crisis. The analysis of the economic discourse of the media from a rhetorical perspective adds a new dimension to the debate about the extent to which the media coverage of economic issues tends to produce uniform thinking, interpretations dominated by technical arguments, and institutional and elitist explanations of current events (Arrese & Vara, 2015).

Stability and uniformity in metaphorical language shows how difficult it is for the media to stand aside from the experts’ discourse or to forge new ways of analysing economic events outside the prevalent consensus, usually guided by the principles of a free market economy. It could be expected, as pointed out by Llamas (2010), that metaphorical

conceptualizations could serve to introduce into the news particular value judgments, based on different professional or political postulates. Not surprisingly, the analysis of causes, effects, and responsibilities on the sovereign debt crisis has been open to multiple and in some cases opposite economic views (Arrese & Vara, 2015). However, this research shows how, at least in the case of the Spanish press, the discourse on the euro crisis has been “captured” by the more traditional forms of metaphorical economic understanding, characterized by a systemic and technical view of the functioning of economies.

This finding reinforces the results of other studies on the media coverage of the euro crisis, which have demonstrated that the media has not been able to distance themselves from the specialized frameworks of analysis used by experts and economic agents. They define the European institutional debate and are very active in setting the limits of the debate, above all in some media outlets like the economic and financial press. This idea has been supported by several studies, such as Fahy et al. (2010), Titley (2012), and Mercille (2014) on the euro crisis coverage by Irish general newspapers and Mylonas (2012) on the representation of the Greek crisis in the German popular daily *Bild*. All of these studies point out that the discussion on the crisis has been dominated by the logic of the elite communication, which highlights the views of political, business, and financial institutions, at the expense of ‘man-on-the-street’ approaches.

Further testing of these findings in different contexts and, above all, in transnational comparative studies could be both interesting and worthwhile. In addition, it may also be worth exploring the extent to which the uniformity in the use of conceptual economic metaphors corresponds or not with the use of the same specific metaphors and keywords.

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